

1. A mud flap that is adapted to be attached to a vehicle behind or outside a wheel thereof;  
said mud flap comprising:
  - (a) an integrally-formed, mesh panel, said panel comprising:
    - (i) a front face;
    - (ii) a top edge;
    - (iii) a plurality of strands;
    - (iv) a plurality of openings defined by said plurality of strands;wherein the sum of the areas of the plurality of openings represents at least 75% of the surface area of the front face of the panel; wherein the openings in the integrally-formed, mesh panel are adapted to permit air to flow therethrough; and wherein the openings in the integrally-formed, mesh panel are sized such that substantially all water and roadway debris encountered by the panel is deflected by the panel;
  - (b) a means for attaching the panel to the vehicle.
2. The mud flap of claim 1 wherein the integrally-formed, mesh panel is made from a polymeric material.
3. The mud flap of claim 1 wherein the integrally-formed, mesh panel has a thickness of less than  $\frac{1}{4}$  (0.25) inch.
4. The mud flap of claim 1 wherein the integrally-formed, mesh panel has a thickness of less than  $\frac{1}{8}$  (0.125) inch.

5. The mud flap of claim 1 wherein the plurality of strands comprise a plurality of substantially parallel, horizontally-disposed strands.
6. The mud flap of claim 1 wherein the plurality of strands comprise a plurality of substantially parallel, vertically-disposed strands.
7. The mud flap of claim 1 wherein the plurality of strands are interwoven.
8. The mud flap of claim 1 wherein the sum of the areas of the openings of the integrally-formed, mesh panel represents at least 85% of the surface area of the front face of the panel.
9. The mud flap of claim 1 wherein the plurality of openings are sized such that there are between 8 and 16 openings per linear inch of the panel.
10. The mud flap of claim 1 wherein the plurality of openings are sized such that there are between 64 and 256 openings per square inch of the panel.
11. The mud flap of claim 1 wherein each opening in the integrally-formed, mesh panel has a minimum dimension of no more than 1/8 (0.125) inch.

12. The mud flap of claim 1 wherein the mud flap includes a plurality of vertical support members adapted to provide support to the panel.
13. The mud flap of claim 12 wherein the plurality of vertical support members are spaced apart at least 5 inches from each other.
14. The mud flap of claim 12 wherein the plurality of vertical support members are spaced apart at least 10 inches from each other.
15. The mud flap of claim 1 wherein the mud flap includes a plurality of horizontal support members adapted to provide support to the panel.
16. The mud flap of claim 15 wherein the horizontal support members are spaced apart at least 5 inches from each other.
17. The mud flap of claim 15 wherein the horizontal support members are spaced apart at least 10 inches from each other.
18. The mud flap of claim 1 wherein the means for attaching the mud flap to a vehicle is located near the top edge of the integrally-formed, mesh panel.

19. A method for deflecting water and roadway debris, said method comprising the following steps:

(A) providing a mud flap, said mud flap comprising:

(1) an integrally-formed, mesh panel, said panel comprising:

(i) a front face;

(ii) a top edge;

(iii) a plurality of strands;

(iv) a plurality of openings defined by said plurality of strands;

wherein the sum of the areas of the plurality of openings represents at least 75%

of the surface area of the front face of the panel; wherein the openings in the

integrally-formed, mesh panel are adapted to permit air to flow therethrough; and

wherein the openings in the integrally-formed, mesh panel are sized such that

substantially all water and roadway debris encountered by the panel is deflected

by the panel;

(B) attaching the mud flap behind a wheel of the vehicle.

20. The method of claim 19 wherein the mud flap is attached to the vehicle such that the mud flap is located outside of a wheel of the vehicle.